

EFFECTS OF WELL-ADJUSTED MATERNITY LEAVE ON THE GENDER WAGE GAP: A PRELIMINARY FRAMEWORK

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ABSTRACT

Effects of Well-Adjusted Maternity Leave on the Gender Wage Gap: A Preliminary Framework

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Since the 1980s, wage convergence between men and women has been slow and inconsistent across high-income nations. Moreover, long-established explanations such that of human capital factors more so explain the gender wage gap aggregate of the past. Scholars of the gender wage gap, acknowledging these trends, have redirected research focus to unexplained factors and have begun scrutinizing the portion of the gender wage gap that is unexplained by differences in measured qualifications and other traditional factors; this portion of the gender wage gap is more formally referred to as the unexplained gender wage gap. This thesis follows the example of these scholars. To illustrate the impact of well-adjusted maternity leave policy on the gender wage gap aggregate, a qualitative case study on maternity leave policy across the United States, Germany, and Sweden was conducted. To exemplify the influence of maternity leave on other determinants of the wage gap, the aspect of leave duration was additionally compared with the female share of managerial positions and tertiary school enrollment across each country. Based on casual observations of the data, there is a positive impact of well-adjusted maternity leave on the gender wage gaps across all three nations. Although well-

adjusted maternity leave appears to have a positive impact, the aspect of leave duration appears to have negative impacts on the gender wage gap and other determinants. These correlations are intriguing but unsubstantiated, nonetheless. Due to resource and time limitations, this study does not account for specific controls and aspects of maternity leave. Indeed, this study is preliminary and tentative—it is merely meant to lay the foundation for more sophisticated work. Moreover, this study is essential in contributing to the scholarly discussion surrounding the impact of policy on the gender wage gap aggregate. How much policy explains of the gender wage gap aggregate remains unspecified, and thus, this study on maternity leave can contribute to future statistical decompositions of policy.

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INTRODUCTION

Much of the literature thus far discusses the impact of more traditional factors on the gender wage gap aggregate. Such literature also explains the problem of a persistently stagnant wage gap and the salience of unexplained factors. Nonetheless, there remains to be a limited amount of literature on the effects of policy as an unexplained factor in particular. Along these same lines, only a select few works specifically focus on the impact of maternity leave.

Based on the limited amount of literature, there has been dissension on whether maternity leave positively impacts the gender wage gap aggregate or not. For example, Baum (2003) and Waldfogel (1999) indicate that the Family and Medical Leave Act of 1993 [FMLA] may be moderate in its effects; Women did, indeed, see an increase in employment after leave but saw little to no effect on their wages (296). On the other hand, Blau and Kahn (2016) show that more and greater family work policy resulted in increased female labor force participation--thus positively impacting female wages (sec. 3). Scholars of the gender wage gap have established some effects of maternity leave on the gender wage gap aggregate, but with limited literature, the full effects of the policy are not known. Because maternity leave is an aspect of the policy, the question of how much policy explains of the gender wage gap aggregate also remains.

The ensuing literary review will give background information on the gender wage gap phenom. Furthermore, this literary review describes the effects of more traditional factors on the gender wage gap. *The Gender Wage Gap: Extent, Trends, and Explanations* (Blau and Kahn 2016) was most useful in this respect. This journal article is renowned for its scholarly merit and serves as a foundation for most contemporary research on the gender wage gap as they quantify

the percentage that each factor has in contributing to the gender wage gap aggregate. They also give overview on past and recent discussion surrounding gender wage decompositions.

1. LITERATURE REVIEW

1.1 Literature Review

The gender wage gap has been a subject of research for decades. This is, in part, due to a certain long-enduring reality: women all over the world are still paid less than their male counterparts. Across OECD [Organisation for Economic Co-operation and Development] nations, women earn approximately 12.8 percent less than men. More particularly, in the United States, the gender wage gap median is 18.5 percent--that is nearly 6 points behind the OECD average in wage difference (OECD n.d.). For decades, the earnings ratio between American men and women was consistent at around 60 percent (Blau and Kahn 2016, 791). Shifts in this earnings ratio prior to 1970 only primarily occurred during wartime as the labor market demanded workers to help with the war effort (807). Following WWII, the U.S Labor Department, recognizing the economic benefits, proposed an equal pay amendment, but this legislation was ultimately turned down. Congress eventually passed equal pay legislation in 1964, but as we shall see, this policy had delayed effects on the gender wage gap. Indeed, the earnings ratio between men and women remained consistent at around 60 percent until the late 1970s (791). The late 1970's period was synonymous with a most pronounced reduction in the gender wage gap, and by 1989, the earnings ratio climbed from 62 percent [in 1980] to 72 percent. This phenomenon continued over the years but at a slower, more inconsistent rate. The 1989-2010 period saw substantially less wage convergence, and by 2014, women were earning about 79 percent of what men were earning on the dollar--a mere 7-point increase from 1989 (793). This certainly begs the question: why has wage convergence among men and women

seemingly plateaued? Why did that substantial increase in wage convergence during the 80's not persist over the ensuing 30 years?

That substantial decrease in the gender wage gap during the 1980 period should have most certainly been attributed to an increase in women's commitment to work (Blau and Kahn 2016, 818). Indeed, the consequence of such newfound sentiment was the inexorable increase in women's relative labor market qualifications. The two most basic measures of human capital of education and full-time work experience, at one time, explained 27 percent of the gender wage gap. After facilitating a significant narrowing of the gender wage gap in the 1980s, these basic human capital factors have, since then, become rather unimportant in explaining the gender wage gap; by 2010, these factors only accounted for a mere 8 percent of the gender wage gap (803).

On average, in 1981, women had lower levels of schooling and were less likely to have a bachelor's degree or advanced degree. By 2011, this education gap had completely capsized--men by this time had a lower average level of schooling and were not as likely to have an advanced degree (Blau and Kahn 2016, 794). This phenomenon is one of particular interest as it is not unique to just the United States. This is a prevailing theme among high-income nations and even developing countries (Evans, Akmal, and Jakiela n.d., 27-31). With the still increasing work commitment among women, there has been an observable shift in the educational focus of women to more math and career-oriented programs. Although there have been improvements in this respect, women continue to lack significant representation in STEM fields nonetheless. These differences in the selection of higher education study among men and women contribute significantly to the gender pay gap of those college-educated individuals but less noticeably to the gender wage gap aggregate (Blau and Kahn 2016, 813).

In addition to the reversal of the education gap, an increase in labor market experience also played a substantial role in the convergence of wages between men and women. In 1981, there was a 7-year disparity in full-time experience among men and women, and by 2011, this disparity had shrunk to just 1.4 years (Blau and Kahn 2016, 794). As further testament to the previously described increase in work commitment, in 1981, men had a 12-percentage point advantage in regards to representation in managerial positions. By 2011, that advantage had been effectively reduced to a mere 2-point advantage. This remarkable development has also been meant with a reduction in the concentration of administrative support and clerical jobs among women (795).

As the literature shows, education and labor market experience--two basic yet, essential labor market qualifications--were especially instrumental in decreasing the gender wage gap aggregate during that 1980 period. Since this period, however, these human capital factors have become increasingly less important in explaining the gender wage gap. Past and present literature have also uncovered the sustained importance of other more traditional explanations in explaining the gender wage gap, however.

Unlike the basic human capital factors, occupation location by gender--that is, the distribution of men and women in occupation as well as industry--remains salient in explaining the gender wage gap. By 2011, occupation location contributed to 50.5 percent of the gender wage gap. At accounting for just over half of the gender wage gap, occupation location by gender is now considered the most substantially measured factor contributing to the gender wage gap (Blau and Kahn 2016, 801). This should no doubt emphasize the importance of continued research on this factor. Indeed, gender differences in distribution by occupation and industry have been extensively researched over the decades. While there has been a reduction in

occupational differences among men and women, gender differences in occupation location played a more substantial role in contributing to the gender wage gap in 2010 than in 1980. This is not to say there has been no occupational development among women over the years, however (791). As expressed previously, women have reduced representation in administrative support and service jobs and have, inversely, increased representation in professional jobs.

Another determinate that has been traditionally analyzed over the decades is the gender division of labor--or, in other words, the differences in gender roles among men and women. Gender division in labor, like with differences in occupation location, remains relevant in explaining the gender wage gap aggregate. Literature suggests that there is a marriage premium for men and a motherhood penalty for women. To elaborate, married men, and more specifically fathers, earn more on average than married women who also have kids. Recent literature additionally highlights the dual career-conflict problem. Men, even among highly educated couples, tend to determine the geographic location of the family. This is important because moving to another city can bolster one family member's career while simultaneously hurting the other family member's career. It can be assumed that the family's decision to move is based on the prospect of one member's ability to earn more, thus, reinforcing the existing gender wage differences. Research suggests that if there was less incentive for dual-earning couples to prioritize the man's career, the average wages for men could expect to be at least 10 percent less (IZA 2020).

Evidently, the more traditional factors of gender differences in occupation location and division of labor are still essential in explaining the gender wage gap. On the other hand, recent literature involving statistical decompositions of the gender wage gap aggregate shows most other traditional explanations such as education and labor market experience to be rather

negligible. Moreover, the literature shows a stagnant and persisting gender wage gap. Scholars have, therefore, elected to shift their focus of research to the unexplained gender wage gap. The unexplained gender wage gap is the "portion of the gender wage gap not accounted for by gender differences in measured qualifications" (Blau and Kahn 2016, 791). To elaborate, it could very well be a result of discrimination against women in the workplace. It may also be the result of omitting certain factors in wage gap decomposition. Factors such as policy, for example, are either overlooked as determinants affecting the gender wage gap aggregate or are disregarded in statistical decompositions for being not easily measured.

The unexplained wage gap is considerably important for the scholarly discussion on the gender wage gap. In the 1980s, the reduction of the unexplained gender wage gap also contributed greatly to a decrease in the gender wage gap aggregate (Blau and Kahn 2016, 799). Unlike the basic human capital factors, and like occupation location, unexplained factors continue to contribute greatly to the gender wage gap. As a matter of fact, unexplained factors now contribute to 38 percent of the gender wage gap (801). Perhaps in shedding light upon the various unexplained factors, scholars can more easily answer the overarching question: why has wage convergence among women and men been slow and inconsistent over these past 30 years? In the ensuing paragraphs, new and exciting research on some unexplained factors are highlighted.

As previously mentioned, a portion of the unexplained gender wage gap could result from gender discrimination in the workplace. Workplace discrimination often comes in the form of stereotyping and social pressure as there is legislation protecting against the more obvious forms of discrimination. As highlighted in the division of labor section, men generally have their careers prioritized as employers assume such preference (IZA 2020). As we shall see, men are

also discouraged or denied from taking parental leave as it is already assumed the mother will take up such responsibility (Cabeza, Barger Johnson, and Tyner 2011). Furthermore, there are social pressures that encourage women to stay home while men work. The impact that these types of discrimination have on the earnings ratio between men and women is obvious in that the earnings ratio is directly affected if women are not paid during time off. Secondly, taking time off further exacerbates the gap in full-time experience, thus affecting the career development of women. As such, it is essential that future statistical decompositions of discrimination take stereotyping and social pressures into account.

Recent research on gender differences in personality traits may help answer questions concerning the unexplained gender wage gap as well as differences in occupational choices among men and women. Both men and women maintain traits that can be perceived as favorable or unfavorable in the context of the labor market. Men, for instance, are less risk-averse, engage in bargaining tactics at a higher rate, and ask for raises more often (Blau and Kahn 2016, 790). Women gain an advantage when it comes to interpersonal relations (818). The literature concerning personality traits as an unexplained factor is still relatively new, and like with most novel research, at least one important aspect is disregarded. Social context could very well be affecting some of the perceived gender differences in personality traits. Additionally, most of the differences in personality traits have been observed in a research setting--and not in a real-world setting. Lastly, a minimal amount of quantifiable data on gender differences in specified personality traits exists (854-855). This determinate is certainly promising as it is undoubtedly linked with gender differences in occupation location but remains unsubstantiated as an independent factor nonetheless.

Exciting new literature also details the salience of various other unexplained factors such as norms, non-cognitive skills, and competition in explaining the gender wage gap. There are most certainly other unexplained factors, but the literature is limited. One such factor of interest apparently contributing to the unexplained gender wage gap is policy (Blau and Kahn 2016, sec. V). Policy is a particularly important unexplained factor to scrutinize because it can, in most cases, control factors that have already been identified as key determinants of the gender wage gap aggregate. Discrimination can be controlled by equal pay legislation and gender quotas, for example. In the case of the previously mentioned division of labor, the institution of well-adjusted family leave policy for both men and women can potentially foster a more progressive family dynamic. Affirmative action is another important policy as it positively interacts with determinants such as education and occupation location.

Policy is important but remains unexplained as a factor for good reason. To elaborate, an example will be used: it was assumed, for some time, that Title VII of the Civil Rights Act of 1964 had little to no immediate effects on female wages. Title VII was passed in 1964 as an effort by the United States government to increase participation in the labor market, but, as emphasized previously, the gender wage gap remained virtually unchanged until the late 1970s to early 1980s. Recent literature, mainly focusing on micro-level studies, does, however, exemplify the immediate and positive effect of Title VII on female wages (Carrington, McCue, and Pierce 2000, 504). Evidence accounting for enforcement activity shows an increase in female wage earnings and probability of employment in traditionally male occupations following the implementation of Title VII up to 1974. The literature attributes the delayed effects of this policy to this time period having profound increases in female labor supply; an expansion in

labor supply will, most often, lead to adverse wage effects, thus obscuring the positive effects of Title VII (sec. VI).

As was alluded to in the previous paragraph, policy, as a determinant to the gender wage gap, is one of convolution. Policy and its effects on the gender wage gap aggregate are not easily measured--hence the realization of policy as an unexplained factor. It is quite simply too hard to measure in conventional statistical decompositions of the gender wage gap aggregate. Indeed, the ways in which policy interacts with the many other gender wage gap determinants must be taken into account. Moreover, there are many types of controls and aspects of specific policy to keep in mind. For example, in measuring the effects of Title VII, enforcement was considered.

1.2 Theoretical Argument

Three key takeaways should be drawn from past and recent literature: First, there is a persistently stagnant wage convergence among men and women; Second, more traditional determinants of the gender wage gap such as education and labor market experience explain less of the aggregate today; Third, unexplained factors are now accounting for 38 percent of the gender wage gap. Considering these takeaways, it is necessary to look outward; specifically, directed analysis on more novel and unexplained factors that are not usually present in conventional gender wage gap statistical decompositions would be discerning. This project, considering that premise, seeks to uncover the effects of well-adjusted maternity leave policy on the gender wage gap aggregate. To contextualize: it is theorized that well-adjusted maternity leave will positively impact the gender wage gap aggregate in the United States, Germany, and Sweden. If this theory is incorrect, this work will still contribute to the scholarly discussion surrounding the impact of policy on the gender wage gap aggregate. How much policy explains

of the gender wage gap aggregate remains unspecified, and thus, this study on the impact of maternity leave specifically can contribute to future statistical decompositions of policy.

2. METHODOLOGY

A qualitative case study on maternity leave policy across the United States, Germany, and Sweden was conducted to illustrate the impact of maternity leave on the gender wage gap aggregate. Starting in 1970, the gender wage disparities in these countries were compared with maternity leave policies over ten-year increments. As we shall see, there is a seemingly casual but inverse correlation between better-adjusted maternity leave policy and less substantial pay gaps. This study attempts to expound on this observation by particularly scrutinizing the aspect of leave duration. Maternity leave has the potential of impacting the gender wage gap directly and indirectly. As mentioned previously, policy most often interacts with other determinants of the gender wage gap. As to show the influence of maternity leave on other determinants, the aspect of leave duration was additionally compared with the female share of managerial positions and tertiary school enrollment in each country.

This research design was appropriate in contextualizing the impact of an unexplained factor [policy] on the gender wage gap aggregate. In choosing one type of policy, this research aims to better survey the implications of maternity leave in particular. By gaining a more thorough and focused understanding of maternity leave and its impact on the gender wage aggregate, this research should serve as a cornerstone for more sophisticated analysis involving multiple types of controls, aspects, and policy. Indeed, an important note is that this project was subject to significant time and resource limitations. Especially in the context of gender wage gap decomposition, such limitations are not necessarily ideal. Subsequent analyses on the impact of maternity leave should consider the findings of this study nonetheless.

The aspects of maternity leave that need to be accounted for in future, less limited analyses are: duration of leave; payment source and amount; other types of leave, which include but are not limited to: paternity leave, parental leave, and adoption leave; protection from unfair job dismissal and/or discrimination; and health protection throughout maternity leave as well as breastfeeding provisions for nursing workers (Öun, Trujillo, and Office 2005, chapter 1). Considering maternity leave policies across countries can vary in length and other aspects, it is crucial to account for similarities, differences, and changes in maternity leave policy over time. Furthermore, the aspects of policy are essential to consider because the absence or presence of one aspect can alter the effects of a specific policy on the gender wage gap aggregate. In the case of maternity leave, for instance, its impact on the gender wage gap will be negatively modified by the aspect of longer leave duration.

Well-adjusted maternity leave should stipulate the source of funding for maternity leave costs and not obligate employers. While the effort to mitigate any amount of discrimination begins with anti-discrimination laws, reducing the direct cost of maternity leave for employers should not be discounted. In nations with unadjusted maternity leave policy, employers are essentially encouraged to discriminate against women as they are too costly to hire. Firms may additionally reduce wages in an effort to finance maternity leave upshot (“Failing Its Families” 2011). In the context of discrimination as a determinant to the gender wage gap, maternity leave and the source of payment should be especially considered.

The aspect of other types of leave is particularly important as well and was briefly touched on in the division of labor section of the literary review. The International Labour Organization [ILO] does not include this aspect in their recommended conditions for maternity leave provisions and, as a consequence, only 49 countries have some sort of leave in place for

fathers (ILO 2012). Parental leave that is only directed at mothers undoubtedly affects the gender wage gap as such leave incites the labor force withdrawal of women for extended periods of time. This consequently results in less full-time experience for women in relation to men. During this time, men are will also experience upward career development at the expense of women (Gross 2019). In an effort to combat the negative effects of time off for women, some innovative policies incentivizing father's leave-taking have been implemented (Dahl, Løken, and Mogstad 2014, sec. IV). The long-run impact of different types of innovative parental leave policies on the gender wage gap, labor market, and division of labor within the family is compelling and should be researched further.

The effectiveness of maternity leave on decreasing the gender wage gap aggregate was measured by changes in wage gaps across countries. The question then was how to single out the effects of maternity leave on the gender wage gap. Indeed, if the gender wage gap is decreasing, this could be attributed to just about any wage gap determinate. One solution is to control for this by way of case study selections. Future more sophisticated research should control for the composition of government in particular--that is, party partisanship and gender ratio in government. With more women in government, the gender wage gap is expected to decrease in turn. That is assuming there to be increased levels of enforcement with female parliamentarians, presumably, acting in self-interest. Furthermore, the gender wage gap should decrease accordingly to a more liberal administration. The enforcement of a particular policy is also an important control but not easily measured.

As with the choice in study, the decision to specifically measure the United States against Germany and Sweden was figured. These countries are comparable in terms of economics and culture but differ in terms of maternity leave adjustment. Countries with similar economies and

cultures should, presumably, have other similarities as well. Indeed, good analysis must aim to eliminate as many different factors as possible. The objectives of this study would be undoubtedly disrupted in comparing the United States to less economically advanced countries as less economically advanced countries have low levels of human assets and are most often subject to economic and environmental shocks. The additional intent behind particularly measuring the United States against the aforementioned countries was that, in relation to other economically advanced countries, the United States has considerably less generous maternity leave provision (ILO 2012). Thus, international comparisons with the United States, in particular, may shed light on the potential effects of better-adjusted policies. Future research with fewer limitations should conduct a more focused study on just two countries. Alternatively, subsequent analyses can look into comparing economically advanced countries against developing countries.

In addition to resource and time limitations, this project had other limitations. With policy being an unexplained factor, there is expectedly limited literature concerning maternity leave as a determinant to the gender wage gap aggregate. This very much exemplifies that egregious disregard of policy and other unexplained factors in the context of gender wage gap decomposition. Moreover, data before the 1990s was especially tough to come by. In particular, there was little data on the gender wage gap prior to the 1990s. Future research should, with some means of acquiring this data, measure the impact of maternity leave on the gender wage gap aggregate across more countries with a longer time span. Lastly, this project intended on controlling for enforcement and composition of government, but such limited data on these controls proved too challenging to overcome.

In surveying for available data on the gender wage gap and maternity leave, the Economic Co-operation and Development [OECD] was especially serviceable. The OECD is an international organization that works closely with policymakers. They publish important data on policy but also work to solve social, economic, and environmental problems (Organisation for Economic Co-operation and Development n.d.). Data on the gender wage disparities across countries came from the OECD. The International Labour Organization [ILO] is also a national organization that aims to achieve social and economic parity (International Labor Organization 2021). Although the majority of my data on maternity leave came from the *Global Gender Gap Report* (Hausmann, Tyson, and Zahidi 2010), the ILO was still useful in obtaining certain data.

3. OVERVIEW

Before scrutinizing the impact of well-adjusted maternity leave on the gender wage gap, it is imperative to, first and foremost, define maternity leave. Considering the theory being tested, it is just as essential to define the aspects that make maternity leave well-adjusted. Maternity leave that best adheres to the ILO's recommended conditions of maternity leave provision will be considered well adjusted.

The ILO has been a leading advocate in ensuring the economic and health security of women. In 1919, the first International Labour Conference (ILC) passed the first Maternal Rights Convention (No. 3). Two subsequent conventions, Convention No. 103 in 1952 and Convention No. 183 in 2000, gradually increased the extent and entitlements of maternal protections at work. Since the International Labour Organization's inception in 1919, when the first maternity rights convention was introduced, and despite the institution of new conventions over time, the ILO remains persistent in its aim to reconcile female reproductive and economic responsibilities by challenging unfair treatment in the workplace based on reproductive status (“100 Years of Fighting for Social Justice” 2019; Öun, Trujillo, and Office 2005, chapter 1).

The ILO's Conditions of Work and Employment Branch created a national maternity rights database showing information on 111 countries' maternal rights laws. Based on this information, the ILO identifies the recommended conditions of effective maternity leave legislation. As per Convention No. 191, 183, and 191, pregnant women and new mothers should be entitled to health and safety threat protection, compensated maternity leave of at least 14 weeks, and breastfeeding breaks. Additionally, women are to be afforded protection from

discrimination and dismissal in the workplace during and after pregnancy Öun, Trujillo, and Office 2005, chapter 1).

While the national maternity rights database is limited to information on 111 countries', the data exemplifies a significant improvement in maternity protection standards worldwide. This data, moreover, shows that virtually all countries have some type of maternity protection provision in place (ILO 2012). Such significant improvement in maternity leave policy can be [presumedly] attributed to Conventions No. 191, 183, 63 and those accompanying conditions of recommendation for maternity leave provision. Indeed, in the context of maternity protection, the opinion of the ILO is one of authority, and thus, future research that is particularly focusing on the impact of adjusted maternity leave should consider the ILO's recommended conditions as standards for well-adjusted maternity leave. Scholars should additionally monitor this data because in understanding the trends of how effective maternity leave provision is implemented, scholars can expect to understand the potential impact of maternity leave on the gender wage gap better.

4. DATA AND RESULTS

In surveying the most important countries in each region of the world, the United States has the least adjusted maternity leave provision. Among OECD countries, the United States is the only country that does not stipulate paid maternity, paternity, or parental leave in national legislation. The Family and Medical Leave Act of 1993 [FMLA] only extends 12 weeks of unpaid maternity leave to eligible persons; that is just 60 percent of workers (Waldfogel 1999, 285). On the other hand, women in most other economically advanced countries are entitled to coverage that lasts 12 to 14 weeks and covers 80 to 100 percent of their income [Table 4.1].

Table 4.1: Conditions of Maternity Leave Provisions Around the World

Country		Leave length in weeks	Percentage of paid leave	Fertility rate	Female share of managerial positions	Female tertiary school enrollment
Europe						
	Italy	20	80	1.4	27.32	74
	Greece	17	50	1.4	29.41	143
	Spain	16	100	1.4	34.97	100
	France	16	100	1.9	35.53	
	United Kingdom	52	90	1.8	36.83	71
	Germany	14	100	1.3	28.1	71
	Norway	46-56	80-100	1.9	35.03	100
	Denmark	52	100	1.8	27.86	94
	Sweden	69	80	1.9	31.32	90
North America						
	United States	12	0	2.1	41.06	102
	Canada	17	55	1.6	35.52	81
	Mexico	12	100	2.2	34.86	42

Table 4.1: Continued

Country		Leave length in weeks	Percentage of paid leave	Fertility rate	Female share of managerial positions	Female tertiary school enrollment
Asia and other regions						
	Japan	14	67	1.3	14.84	
	India	12	100	2.7	12.89	30
	China	13	100	1.8		59
	Iran	52	100	1.8	18.85	59
	South Africa	16	60	2.5	31.44	28
Latin America						
	Argentina	13	100	2.2	31.6	113
	Brazil	17	100	1.9	36.45	49
	Colombia	12	100	2.4		60

Data from Table 4.2 presents the gender wage gaps in the United States, Germany, and Sweden. The numbers indicated in this table are median percentages of how much less women make in relation to their male counterparts. Data from this table shows the gender wage gap in the United States to be around 18 percent. The table also shows Germany and Sweden to have lower pay gaps at 16.8 and 14.3 percent, respectively. In further exemplifying a more substantial pay gap in the United States, please recall that the United States is nearly 6 points behind the OECD average in wage difference of only 12.8 percent.

Table 4.2: Gender Wage Gap at Median (Percentage)

Country	1970	1980	1990	2000	2010
Germany	33	28	27	20.5	16.8
Sweden	18.3	12.8	19	15.5	14.3
United States	38.1	36.6	28.5	23.1	18.8

In considering the fact that most countries have substantially better-adjusted maternity leave policies with the fact that the pay gap in the United States is bigger than most other countries, a casual yet perceivable correlation between less adjusted maternity leave policy and more significant gender pay gaps can be made. In an effort to expound on this inverse correlation, the aspect of leave duration was taken into account and compared with the gender wage disparities in the United States, Germany, and Sweden directly. It has been previously stated that these three countries are to be particularly examined as they are economically and culturally comparable. Most important, however, is that these countries have especially distinct maternity leave provisions. As to show the impact of maternity leave on other determinants of the gender wage gap, the aspect of leave duration was additionally compared with the female share of managerial positions and tertiary school enrollment in each country.

As touched upon, the United States is quite conservative when it comes to maternity leave policy. The FMLA only extends to private businesses with more than 50 workers (Waldfogel 1999, 289). This policy condition results in about 40 percent of the American population being unable to take advantage of maternity leave (285). Of those eligible individuals, many choose not to take advantage of the FMLA as it would prove too costly to take unpaid time off. By contrast, the majority of European Union nations cover between 80 percent and 100 percent of incurred parental leave costs [Table 4.1]. For example, Germany provides 100 percent of paid leave while Sweden provides 80 percent but also entitles women to 69 weeks of leave [Table 4.1].

Some speculation on whether more adjusted maternal leave policies will result in an increased fertility rate has been raised. Table 4.1 very much dispels this assumption, however. Despite the EU's exceptional parental leave benefits, the average fertility rate has remained

consistent at an average of 1.64 over the years. The fertility rate in the United States, by contrast, is 2.1 [Table 4.1].

The most essential aspect of maternity leave to consider when determining the impact of this policy on the gender wage gap aggregate is duration of leave. Leave duration is of particular importance as it essentially defines maternity leave (maternity leave cannot exist without some duration of leave). As such, subsequent research on the impact of maternity leave should unconditionally account for this aspect. Considering the salience of leave duration as an aspect, the following observations consider the effect of leave duration across the United States, Germany, and Sweden.

In casually observing lengthy periods of time off and the effects of this on the gender wage gaps in these countries over time, there appears to be the same negative impact on women across all three nations. Moreover, the data shows that although American women are entitled to less lengthy periods of maternity leave, the consequences of time off on women's pay are still more significant than in Germany and Sweden. As further evidence of the negative impact of longer durations of leave on women's wages, Australia, New Zealand, and Belgium entitle women to little time off and have comparatively less substantial pay gaps. By contrast, countries such as The Czech Republic and Austria give much in terms of time off but have more substantial pay gaps.

The data, moreover, insinuates a correlation between duration of leave and specific determinants of the gender wage gap. These determinants are female share of managerial positions and female tertiary school enrollment.

Based on the data, longer durations of leave seem to have negative effects on the career development of women. Women held 34 to 43 percent of management positions in countries

with shorter maternity leave. By contrast, in countries with longer leave, such as Sweden, women hold just 32 percent of management positions. Please note that management positions include senior and middle management [Table 4.1].

In further observing the effects of leave duration, the data suggests that leave duration may affect the education of women. Observations from the data at hand indicates a positive correlation between shorter periods of leave and higher educational levels. The United States and Greece have some of the highest female tertiary school enrollment with gross enrollment ratios of 143 and 102 respectively but extend little in terms of leave length; the United States entitles women to 12 weeks of leave while Greece gives 17 weeks [Table 4.1]. Gross enrollment ratio is the ratio of women enrolled in tertiary (post-secondary) school to women not enrolled, regardless of age. That number is multiplied by 100.

In conclusion, the data suggests a positive impact of well-adjusted maternity leave on the gender wage gaps across the United States, Germany, and Sweden. Although well-adjusted maternity leave appears to impact wage disparities between men and women positively, the specific aspect of leave duration appears to have a negative impact. Additionally, this study presents strong but casual correlations between longer duration of leave and the downward [and limiting] career development of women. Longer durations of leave can also be correlated with lesser education levels for women. Lastly, better-adjusted maternity leave does not result in higher fertility rates.

A speculated point of contention for this work is: the data shows the negative effects of longer durations of leave--particularly on women's wages. Considering longer leave duration is a condition of well-adjusted maternity leave provision, how does this data indicate the positive impact of well-adjusted maternity leave on the gender wage gap? Please recall that although the

United States entitles women to less time off, women's wages are still more significantly impacted. The wages of American women are more drastically impacted, even in taking shorter periods of time off, because, unlike other well-adjusted maternity leave policies, the FMLA does not very effectively protect against unfair job treatment or provide other types of leave such as paternity leave. This is, by no means, an attempt to dismiss the negative effects of longer leave durations. Rather, the point being made is this: the positive effects of other well-adjusted maternity leave conditions (such as providing paternity leave) exceed those negative effects of longer leave duration.

CONCLUSION

The bodies of literature concerning the impact of more traditional determinants on the gender wage gap aggregate is vast. Most recent literature recognizes the fact that long-established explanations such that of human capital factors more so explain the gender wage gap aggregate of the past and details the prominence of unexplained factors in explaining the gender wage gap aggregate. Nonetheless, there remains to be a lack of literature surrounding the impact of unexplained factors. Perhaps this fact exemplifies the arduousness that is gender wage gap decomposition. Indeed, unexplained factors are especially challenging to measure-- that is precisely why they remain unexplained. This case study should encourage more sophisticated research on the unexplained factor of maternity leave in particular but should also encourage similar preliminary and tentative case studies on other types of policy. In the interest of revealing how much policy explains of the gender wage gap aggregate, foundational work will be needed. Perhaps in building a foundation of preliminary insight, scholars can more easily measure the overall effect of policy on the gender wage gap aggregate.

The findings of this study support but do not necessarily prove the theory of well-adjusted maternity leave positively impacting the gender wage gap aggregate. The theory is supported in that the United States has substantially less adjusted maternity leave and a more significant pay gap in relation to other countries. In an attempt to expound on this finding, the particular aspect of leave duration was accounted for. Leave duration was found to have negative effects on the gender wage gap aggregate, however. Based on the limited literature, it is assumed that other aspects of maternity leave, such as providing other types of leave, nullify the negative effects of leave duration nevertheless. This theory is supported but not necessarily proven as it

would be inaccurate to deduce a cause-and-effect relationship on the sole basis of an observed association-- hence the persistent conscription of future, more sophisticated research on these findings. These findings, nonetheless, contribute to the scholarly discussion on policy and its impact on the gender wage gap aggregate.

REFERENCES

- Blau, Francine D., and Lawrence M. Kahn. "The Gender Wage Gap: Extent, Trends, and Explanations." *Journal of Economic Literature* 55, no. 3 (2016): 789–865.
- Cabeza, Maria, Jennifer Barger Johnson, and Lee Tyner. "The Glass Ceiling and Maternity Leave as Important Contributors to the Gender Wage Gap." *Southern Journal of Business and Ethics*, January 1, 2011.
- Carrington, William J., Kristin McCue, and Brooks Pierce. "Using Establishment Size to Measure the Impact of Title VII and Affirmative Action." *The Journal of Human*
- Dahl, Gordon B., Katrine V. Løken, and Magne Mogstad. "Peer Effects in Program Participation." *The American Economic Review* 104, no. 7 (2014): 2049–74.
- Evans, David, Maryam Akmal, and Pamela Jakiela. "Gender Gaps in Education: The Long View." Center for Global Development. Accessed May 10, 2021.
<https://www.cgdev.org/publication/gender-gaps-education-long-view>.
- Human Rights Watch. "Failing Its Families," February 23, 2011.
<https://www.hrw.org/report/2011/02/23/failing-its-families/lack-paid-leave-and-work-family-supports-us>.
- Gross, Elana Lyn. "How Paid Paternity Leave Can Help Close the Gender Pay Gap." *Forbes*, May 14, 2019. <https://www.forbes.com/sites/elanagross/2019/05/14/how-paid-paternity-leave-can-help-close-the-gender-pay-gap/>.
- Hausmann, Ricardo, Laura Tyson, and Saadia Zahidi. "Global Gender Gap Report 2010," 2010.
<https://www.weforum.org/reports/global-gender-gap-report-2010/>.
- ILO. "100 Years of Fighting for Social Justice." Press release, January 2, 2019.
[https://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS_657787/lang--en/index.htm](https://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS_657787/lang-en/index.htm).
- ILO. "TRAVAIL Legal Databases." Conditions of Work and Employment Programme, 2012.
<https://www.ilo.org/dyn/travail/travmain.home>.

- International Labor Organization. “What Is the International Labour Organization (ILO)?” Investopedia, April 17, 2021. <https://www.investopedia.com/terms/i/international-labour-organization.asp>.
- IZA. “What Explains the Unexplained Gender Pay Gap?” IZA Newsroom, September 24, 2020. <https://newsroom.iza.org/en/archive/research/what-explains-the-unexplained-gender-pay-gap/>.
- OECD. “Employment: Gender Wage Gap.” OECD.Stat. Accessed May 9, 2021. <https://stats.oecd.org/index.aspx?queryid=54751#>.
- Organisation for Economic Co-operation and Development. “Together, We Create Better Policies for Better Lives.” OECD. Accessed May 9, 2021. <https://www.oecd.org/about/>.
- Öun, Ida, Gloria Pardo Trujillo, and International Labour Office. Maternity at Work: A Review of National Legislation: Findings from the ILO’s Conditions of Work and Employment Database. International Labour Organization, 2005.
- Waldfoegel, Jane. “The Impact of the Family and Medical Leave Act.” *Journal of Policy Analysis and Management* 18, no. 2 (1999): 281–302. [https://doi.org/10.1002/\(SICI\)1520-6688\(199921\)18:2<281: AID-PAM5>3.0.CO;2-J](https://doi.org/10.1002/(SICI)1520-6688(199921)18:2<281: AID-PAM5>3.0.CO;2-J).